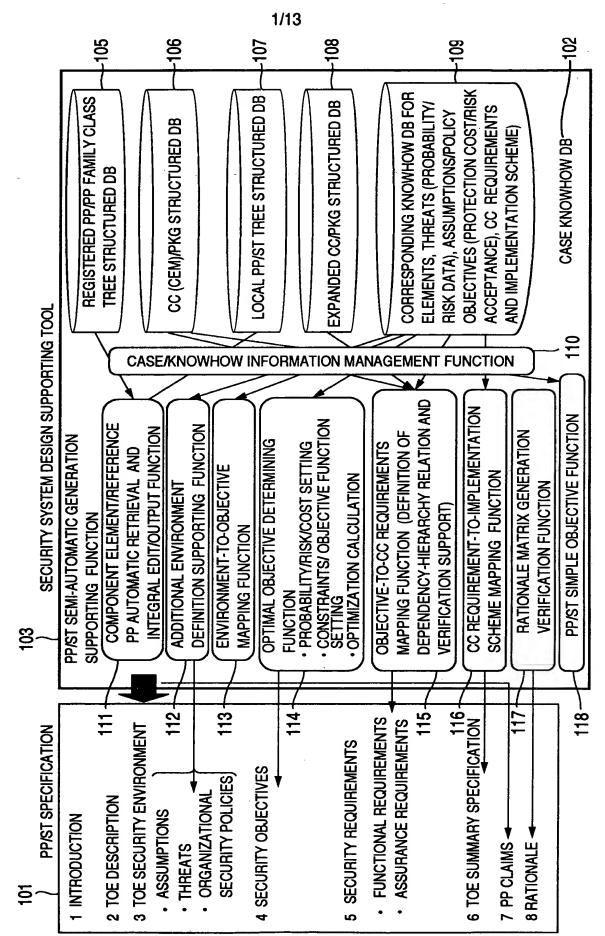
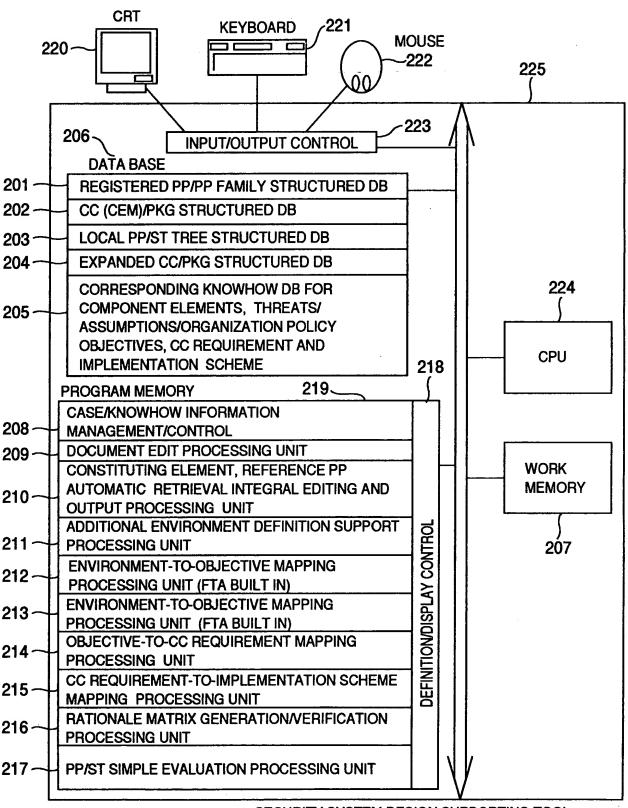
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FIG.2



SECURITY SYSTEM DESIGN SUPPORTING TOOL

## FIG.3

**START** 

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SELECT AS A COMPONENT ELEMENT THE REFERENCE REGISTERED AND THE LOCAL REGISTERED PP/ST PART ICONS DISPLAYED IN TREE AS A REFERENCE IN PP/ST TEMPLATE SELECT DIALOG ON DESIGN SUPPORTING TOOL INITIAL SCREEN, AND GENERATE TOE CONFIGURATION DIAGRAM.

RETRIEVE PP/STS OF SELECTED CONSTITUTING ELEMENT FROM DATA-BASE BY DEPRESSING PP/ST TEMPLATE DIALOG SETTING BUTTON, INTEGRALLY EDIT DEFINITION INFORMATION OF PP/ST UNDER EACH CHAPTER AND OUTPUT AND DISPLAY ON DOCUMENT EDIT SCREEN.

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INTERACTIVELY ADD/CORRECT THE DEFINITION CONTENTS UNDER CHAPTERS 1 TO 3 FOR OUTPUT PT/ST DRAFT BY THE DOCUMENT EDIT FUNCTION, SELECT ADDITIONAL ENVIRONMENT DEFINITION SUPPORT OF TOOL MENU FOR ADDITIONAL CONSTITUTING ELEMENT, RETRIEVE CORRESPONDING CASE PARTS OF CONSTITUTING ELEMENTS OF CORRESPONDING KNOWHOW DB INCLUDING THREATS, ASSUMPTIONS AND ORGANIZATIONAL POLICIES BY DEPRESSING ADDITIONAL CONSTITUTING ELEMENT SETTING BUTTON DISPLAYED AS REFERENCE, AND ADDITIONALLY DEFINE THE DEFINITION CONTENTS OF SECURITY ENVIRONMENT UNDER CHAPTER 3

SELECT ENVIRONMENT-TO-OBJECTIVE MAPPING OF TOOL MENU, MAP THE THREATS/ASSUMPTIONS/ORGANIZATIONAL POLICIES CONSTITUTING THE CONTENTS OF DEFINITION UNDER CHAPTER 3 TO SECURITY OBJECTIVES BY RETRIEVING CORRESPONDING KNOWHOW DB, AND ADDITIONALLY DEFINE DIFFERENCE WITH THE OBJECTIVE DEFINED UNDER CHAPTER 4

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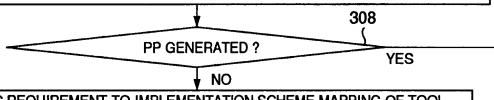
SELECT DATA SETTING FOR DETERMINING OPTIMAL OBJECTIVE OF TOOL MENU, CHECK OCCURRENCE PROBABILITY OF THREATS AND AFFECTED LOSS AMOUNT UNDER CHAPTER 3 AND PROTECTION COST VALUE OF SECURITY OBJECTIVE UNDER CHAPTER 4 DISPLAYED AS A DIALOG BY RETRIEVING CORRESPONDING KNOWHOW DB, AND ADDITIONALLY SET NEW THREATS/OBJECTIVES.

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SELECT OBJECTIVE OPTIMIZATION CALCULATION FOR DETERMINATION OF OPTIMAL OBJECTIVE OF TOOL MENU, SET CONSTRAINTS AND OBJECTIVE FUNCTION DISPLAYED IN DIALOG, EXECUTE CALCULATION BY DEPRESSING EXECUTION BUTTON, AND AUTOMATICALLY CORRECT DEFINITION CONTENTS OF THREATS UNDER CHAPTER 3 AND OBJECTIVES UNDER CHAPTER 4 CORRESPONDING TO COMBINATION OF SECURITY OBJECTIVE PROVIDING OPTIMAL SOLUTION

SELECT OBJECTIVE-TO-CC REQUIREMENT MAPPING AND EAL LEVEL OF TOOL MENU, RETRIEVE CC/PKG STRUCTURED DB, EXPANDED CC/PKG STRUCTURED DB AND CORRESPONDING KNOWHOW DB, SPECIFY CC REQUIREMENTS CORRESPONDING TO OBJECTIVE DEFINED UNDER CHAPTER 4, AND AUTOMATICALLY CORRECT THE CONTENTS OF DEFINITION OF SECURITY REQUIREMENTS UNDER CHAPTER 5



SELECT CC REQUIREMENT-TO-IMPLEMENTATION SCHEME MAPPING OF TOOL MENU, RETRIEVE CORRESPONDING KNOWHOW DB, SPECIFY IMPLEMENTATION SCHEME CORRESPONDING TO CC REQUIREMENTS DEFINED UNDER CHAPTER 5, AND SET DEFINITION CONTENTS OF SYSTEM SUMMARY SPECIFICATION UNDER CHAPTER 6

SELECT RATIONALE MATRIX GENERATION/VERIFICATION OF TOOL MENU,
AUTOMATICALLY GENERATE CORRESPONDING MATRIX TABLE FROM
CORRESPONDENCE BETWEEN ENVIRONMENT, OBJECTIVES, CC REQUIREMENTS
AND IMPLEMENTATION SCHEME UNDER CHAPTERS 3 TO 6 (OR TO CHAPTER 5
FOR PP GENERATION), AND GIVE MESSAGE IF VERIFICATION SHOWS THE
PRESENCE OF INFORMATION LACKING CORRESPONDENCE

SELECT PP/ST SIMPLE EVALUATION OF TOOL MENU, RETRIEVE CC (CEM)/PKG STRUCTURED DB, DISPLAY PP/ST EVALUATION CHECK LIST FOR CEM IN DIALOG, AND CHECK INTERACTIVELY

SELECT STORAGE WITH NAME IN FILE MENU, SET NAME, AND REGISTER GENERATED PP/ST IN LOCAL PP/ST STRUCTURED DB

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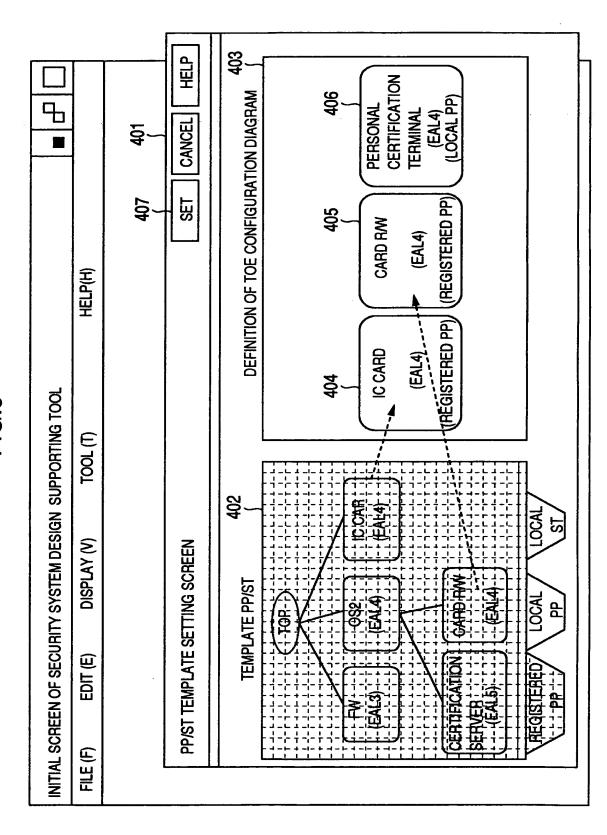
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**END** 

**FIG.5** 

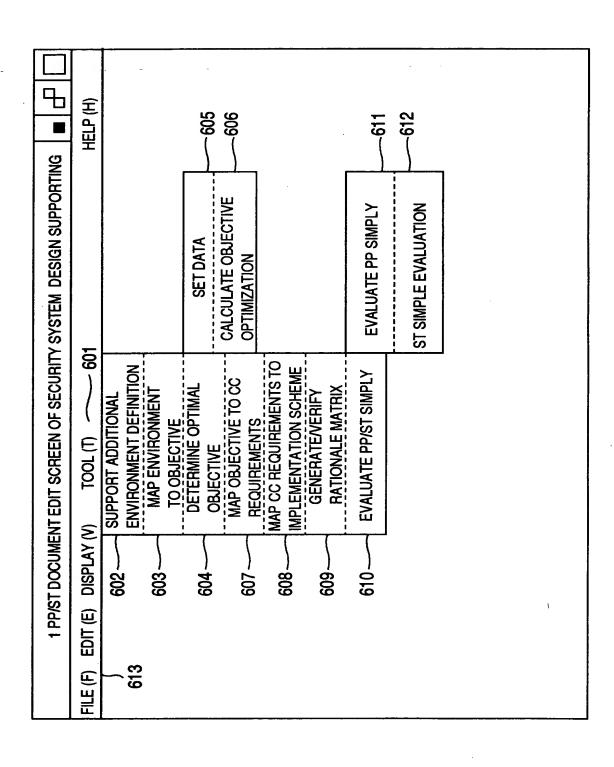


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PP/ST DOCUMENT	EDIT SCREEN	PP/ST DOCUMENT EDIT SCREEN OF SECURITY SYSTEM DESIGN SUPPORTING TOOL	TEM DESIGN SUF	PORTING TOOL	7501 ■ □	
FILE (F)	EDIT (E)	DISPLAY (V)	TOOL (T)	HELP (H)		
CHAPTER 1 INTRODUCTION	ODUCTION					
ICC-PP: INTRODUCTION R/W-PP: INTRODUCTION	CTION	205				
TERMINAL-PP: INTRODUCTION	RODUCTION					
CHAPTER 2 TOE OUTLINE	OUTLINE INF					
R/W-PP: TOE OUTLINE		- 503				
TERMINAL-PP: TOE OUTLINE	E OUTLINE					
CHAPTER 3 SECURITY ENVIRONMENT	IRITY ENVIR	ONMENT				
3.1 ASSUMPTIONS	(A					
ICC-PP: ASSUMPTIONS	SNOI					
R/W-PP: ASSUMPTIONS	FIONS					
TERMINAL-PP: ASSUMPTIONS	SUMPTIONS					
3.2 THREATS						
CHAPTER 7 PP CLAIMS USED	AIMS USED					
ICC-PP IDENTIFICATION	ATION	Š				
R/W-PP IDENTIFICATION	ATION /	204				
CHAPTER 8 RATIONALE	ONALE					

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**FIG.7** 

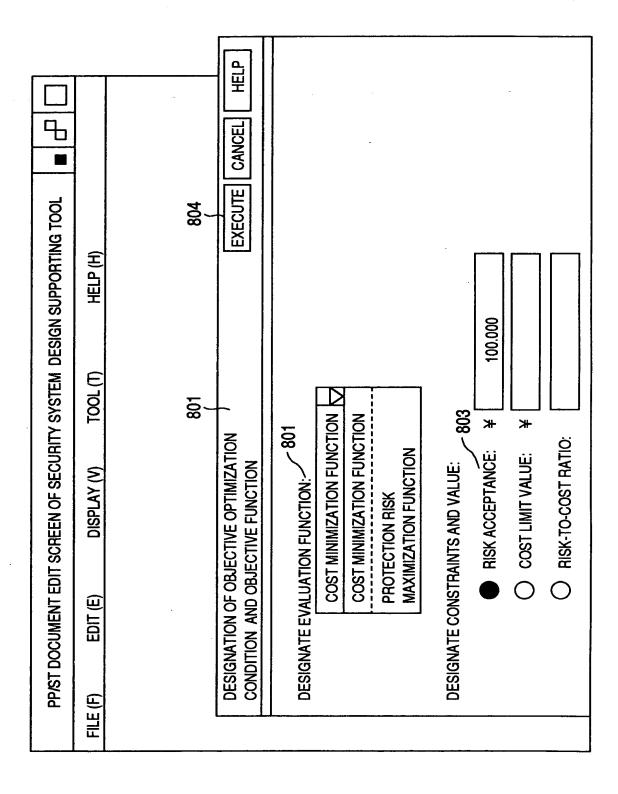


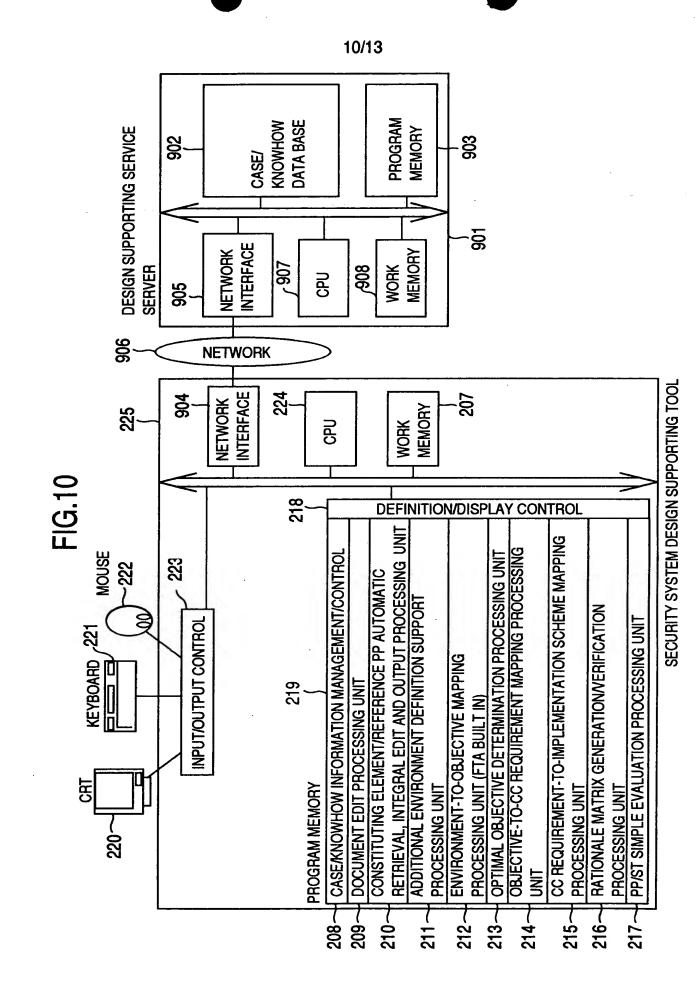
CC REQUIREMENTS/IMPLEMENTATION SCHEME **MPLEMENTATION SCHEME** PROTECTION COST (YEN) (0-TXX, 0-TYY), (0-TZZ) O-AXX, O-AYY, O-AZZZ PROTECTION COST DATA TABLE 205 10,000 OBJECTIVES O-PXX,O-PYY XdmI CORRESPONDENCE TABLE CORRESPONDENCE TABLE **ENVIRONMENT/OBJECTIVE** COUNTERMEASURES REQUIREMENTS CC FUNCTIONAL FAU GEN.1 **ENVIRONMENTS** (OBJECTIVES) 0-TX A-XXX P-XX XX-ORGANIZATIONAL POLICIES AFFECTED LOSS CC FUNCTIONAL REQUIREMENTS P-XXX **ENVIRONMENT CORRESPONDENCE TABLE** AMOUNT (YEN) 1000.000 FAU\_GEN.1,FAU\_STG.1 OBJECTIVE/CC REQUIREMENT ELEMENTS ASSUMPTIONS THREATS T-XX CORRESPONDENCE TABLE THREATS DATA TABLE COMPONENT ELEMENT PROBABILITY OF OCCURRENCE 0.004 A-XXX OBJECTIVES ST-0 THREATS CompX T-XX

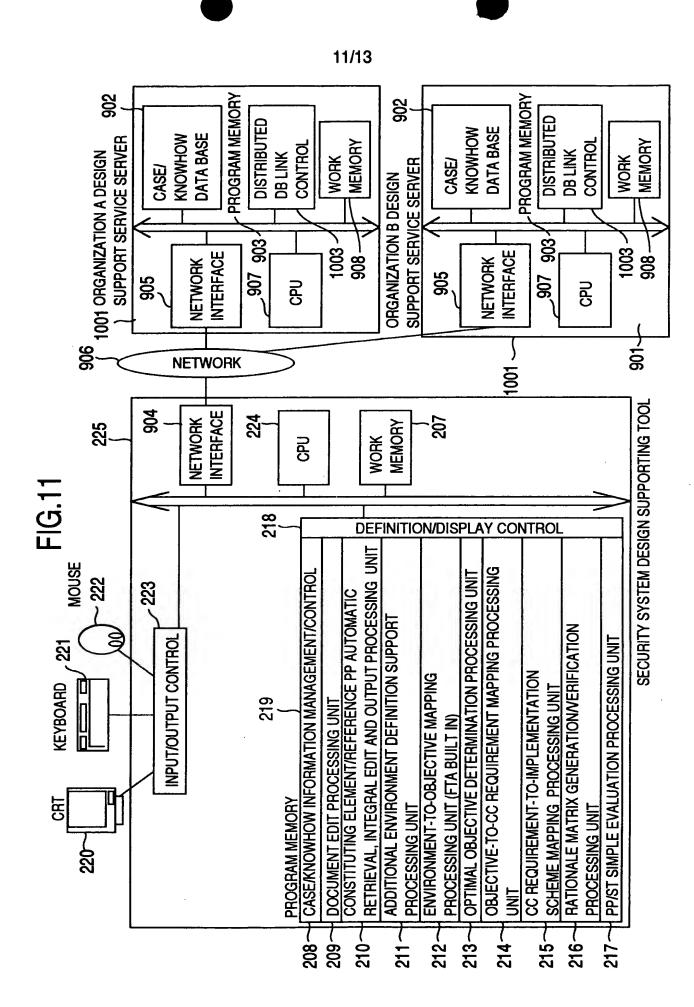
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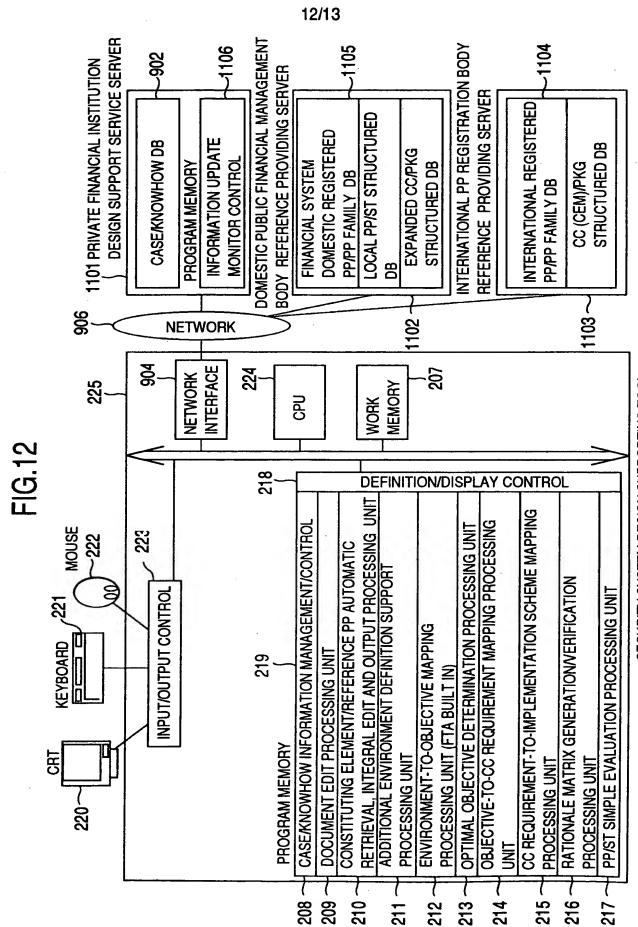
FIG.8

FIG.9





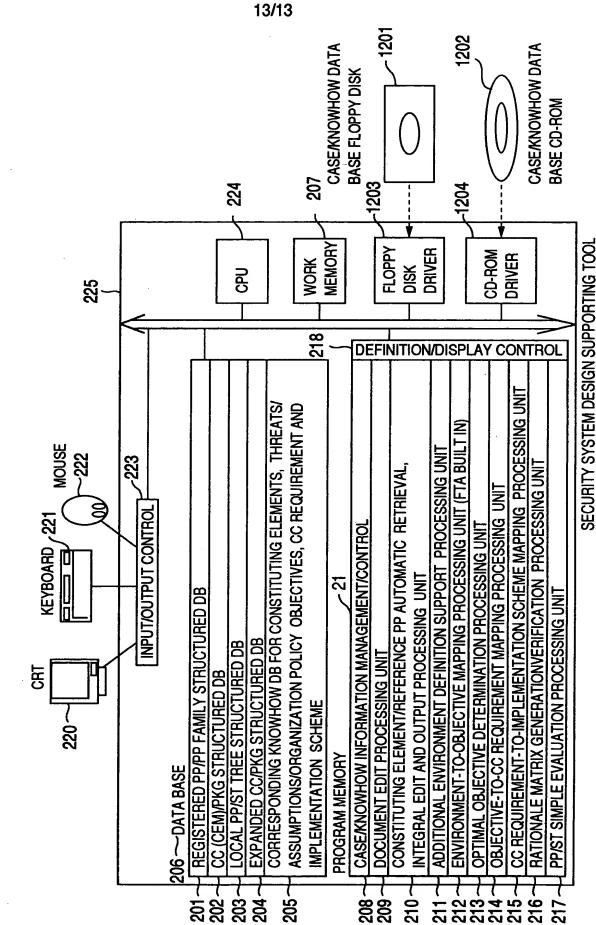




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SECURITY SYSTEM DESIGN SUPPORTING TOOL

FIG. 13



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